## **Editorial**

## CANCER – THE ULTIMATUM FROM OUR CHEMICAL BASED CIVILIZATION

A report has been published by the Macmillan Cancer Support of London in BBC News that 47% of the British will get cancer in their lifetime by 2020. Cancer rate could be increased by 50% to 15 million new cases in the year 2020 as the report of WHO. In the year 2000, malignant tumors were responsible for 12 per cent of the nearly 56 million deaths worldwide from all causes. More than a quarter of deaths are attributable to cancer in many countries. But it is clearly evident from the report that healthy lifestyle and public health actions could change this trend and could prevent as many as one third of cancers worldwide.

It is observed that every year about 8 lakhs new cancer patients get registered with the National Cancer Registry Programme in our country. The Crude Incidence Rate (CIR) for Cervix cancer, Breast cancer and Oral cancer is 21.3, 17.1 and 11.8 per lakh population respectively, according to the National Commission on Macroeconomics and Health (NCMH 2005).

The NCMH epidemiological studies also reveal that 70-90% of all cancers are environmental among which lifestyle related factors are the most important. Dietary practices, reproductive and sexual practices etc. account for 20-30% of cancers. Consumption of Tobacco, diet with high fat and high calorie and low fiber, low physical activity, consumption of alcohol etc. act along with some genetic factors in the way of initiation of cancer.

These reasons are common in almost everywhere of our planet and perhaps known to at least every educated person of our country. Apart from these common causes, some other factors may play some very important role in this process, particularly in the third world countries like India. Residues of pesticides, fertilizers, detergent, colorants and thousands of such other chemicals mix with surface water, enter in the food chain and afterwards reach the underground water by leaking. Regular consumption of these chemicals and also chemicals like Arsenic, Fluoride etc. through drinking water, consumption of very toxic chilling agent, 'Ethylene glycol' and many other chemicals with the cold drinks, leaked toxins of plastic cup containing hot beverages, bottles and sachets containing food and drink items definitely play many important roles.

We, the new generation of Indians are avoiding old cereal based home made food and becoming habituated to take food most of which are prepared by frying food items and adding with different spices. We are not having any report on the quality of oil or the spices used in our so called street restaurants, hotels, festive food suppliers etc. There are ample chances of getting a lot of toxic chemicals with fast food at road side. The quality of tomato sauce added, nature of frying media (oil?) used during preparation of fried food, which remain solid even at hot summer and having a color of coal tar for repeated boiling at very high temperature, other synthetic flavoring and coloring agents used to prepare famous cheap foods like Kachwri, Biriani, Moglai, Egg roll, Samosa, Fish fry, Chicken pakora, Paneer pakora, Phuchka, Alukabli, Pampri-chat and other fried food are highly suspicious. On the other hand, chemicals used as various adulterants in the basic items used for vehicle and frying (wheat flour, gram chuni, spices, oil etc.) and the basic items obtained from animal produces (paneer, fish, meat etc.), use of added artificial colors, preservatives from paraffin to hundreds of other chemicals in some other basic items in the steps of production, preservation, storage, transportation and sale (fruits, vegetables, cereals) as well as other chemicals used during preparation of food (flavoring and emulsifying agents etc.) in all ready to eat food may be far above than the recommended dose or number, if properly measured.

Toxic effect of Monosodium glutamate among Chinese foods and Acrylamide in Chips are known to us as these are known and studied, but effect of some mixtures of different toxic chemicals in the name of food/food items (like milk products made from the milk with adulterant from urea to formaldehyde up to detergent based synthetic milk!) may have some dramatically different health impact than the reports found in the internet!

Indians have a definite attraction for sweets. Sweets are a part of our social and devotional rituals. The sweet shops use milk and milk products, and also prepare some other sweets with the basic items like gram chuni or wheat flour. We get reddish Gulbjamun, very deep yellow Jilabi, red Amriti, deep green and deep red Bundia inside the deep yellow Bundia and so on. We never bother about the colorants used in these famous sweets. In the rural areas, locally made sweetened ice and toffee of different color and smell are sold in different names and regularly taken by the children. In rural India, the easily available cheap colorants are used for coloration of food items. Cheap toxic colorants used during color festival *Holi* are detected by some Indian researchers in sweets! How toxic they are for our health after consumption? Children are the main eater of these food items. We are not aware of the colors used in these food items as the reports are not found in the media.

We can find a huge number of Soda shops in each and every city and towns of India. People, mainly children are fond of these cold drinks which may be of any color and any fruit flavor and costing only Rs. 5.

Life of almost all modern Indian starts with a cup of tea, which may have odor of synthetic origin, and may contain insecticides and the plastic cup may add some more poisons in the hot tea! We are accustomed with the use of different foods, drinks, huge number of cosmetics, from body spray to hair and body colorants, self selected allopathic medicines etc. as a part of our modern lifestyle. It can be easily assumed what number and what varieties of chemicals enter in our body every day. Like all other machinery, our liver and kidney have also a limitation in the power of clearance of such chemical load. These vital organs may be affected and also many and much of these chemicals may be accumulated inside different tissues of our body. Thus, the cumulative effect of regular consumption of low amount of a large number of synthetic chemicals may create ultimately an environment inside our body leading to gereration of several types of diseases. Moreover, either DNA molecule of some tissue may get irreversible genetic damage or mutations or some tissue may start to grow abnormally due to the effect of those chemicals, both of which can lead to cancer, slowly but inevitably.

To live with lesser number of hazardous diseases and for a healthy future generation, we must have to be conscious about these dangerous aspects of our chemical based civilization.

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